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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,238	12/02/2005	Evgeny Evgenyevich Fesenko	U 015763-7	2731

140 7590 04/23/2007

LADAS & PARRY
26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER	
MITRA, RITA	
ART UNIT	PAPER NUMBER
1656	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,238	FESENKO ET AL.	
	Examiner	Art Unit	
	Rita Mitra	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *12-36* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicants' Preliminary Amendment filed on December 8, 2005 is acknowledged. Amendment to the specification is noted. Claims 1-11 have been cancelled. New claims 12-36 have been added. Therefore, claims 12-36 are under consideration.

Election/Restriction

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

I. Claims 12-23 drawn to a pharmaceutical composition comprising as an active principle a peroxiredoxin and/or a fragment thereof and optionally dihydrolipoic acid and a pharmaceutically acceptable additive, wherein said peroxiredoxin is human peroxiredoxin Prx VIhum.

II. Claims 24-27, drawn to a method of enhancing the antioxidant protection of mammals, comprising contacting the pharmaceutical composition of claim 12 with the intercellular space of a tissue, organ or a whole organism of a mammal, wherein contacting of the pharmaceutical composition is effected with a different therapeutic agent which is administered to said mammal.

III. Claims 28-33, drawn to a method for producing a pharmaceutical composition comprising providing a polypeptide of a peroxiredoxin or of a fragment thereof, wherein said polypeptide is prepared recombinantly by expressing DNA of SEQ ID NO: 1 that encodes an amino acid sequence of SEQ ID NO: 2.

IV. Claims 34-36, drawn to a nucleic acid molecule which encodes peroxiredoxin or a fragment thereof, wherein the nucleic acid comprises a nucleotide sequence encoding the amino acid sequence of natural human protein of peroxiredoxin Prx VI (SEQ ID NO: 1) or an N-terminal DNA fragment of peroxiredoxin Prx VIhum (SEQ ID NO: 3); recombinant plasmid DNA and host cell or a cell line.

The claims of these groups I-IV are directed to different inventions, which are not linked to form a single general concept under PCT Rule 13.1, because, under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

Applicants' invention, considered as a whole, lacks any technical feature that defines a contribution over the prior art (see 'Y' reference in international search report, Fujjii et al. Eur. J. Biochem, 268 (2), pp 218-224, Jan, 2001). The reference describes expression of peroxiredoxin VI in rat lung and kidney after birth implies an antioxidative role.

Because the inventive compound was known at the time this application was filed, persons skilled in the art could easily select different species of peroxiredoxin (PrxI- PrxVI) as the peroxiredoxin in the reference and clone the DNA that encodes the peroxiredoxin protein and prepare the protein by expressing the DNA of SEQ ID NO: 1 that encodes an amino acid sequence of SEQ ID NO: 2. Moreover, persons skilled in the art could easily predict the effect of the use of the product. This renders the invention of group I obvious over the prior art. Accordingly, the claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept and lack of unity is deemed proper.

Species Election

For Group II, this application contains claims directed to the following patentably distinct species of the claimed therapeutic agent: a) antibacterial, antivirus, antifungal, antihistaminic preparations, hormones; vitamins; or cytokines; b) an enzyme ; c)a low-molecular weight compound; d) a preparation for transplantation or cryopreservation of organs and e) a biologically active protein (claim 27) . The species are independent or distinct because they are structurally and functionally divergent and would require separate non-overlapping searches.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed sub-genus for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 26 is generic. Should Group II be elected, applicants are required to select single agent from claim 27 a), b), c), d) or e).

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable

thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicants are advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Mitra whose telephone number is 571-272-0954. The examiner can normally be reached on M-F, 10:00 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Mitra, Ph.D.
April 14, 2007

KATHLEEN KERR BRAGDON, PH.D.
SUPERVISORY PATENT EXAMINER